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ABSTRACT

In this booklet, specialists in varied academic disciplines seek to determine how the classroom can function to sharpen man's understanding of the population problems and to prod him to the application of reason. Demographer and sociologist Philip Hauser places the problem in the framework of explosive world population growth, and highlights the fact that though the schools have been gravely overburdened by population increases, their curriculum in no way reflects the population crisis. Educator Sloan R. Wayland gives documented evidence that the problem is world-wide and schools everywhere lag in preparing students to understand this problem. Biologist Irwin Slesnick reports on an experimental high school program integrating instruction in population and family planning which show that the classroom can successfully handle the material. How a committee of specialists can plan so that models may be multiplied and become generally accepted is the subject of physicist Jerrold Zacharias. To these are added a report by Alan Guttmacher, M.D., President of Planned Parenthood-World Population, showing how initiative on the community level is already enriching teaching programs with population information and materials on family planning. An annotated bibliography lists books, pamphlets, articles, and films that deal with population and related problems. (Author/JLB)

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family planning, population problems and the secondary school curriculum

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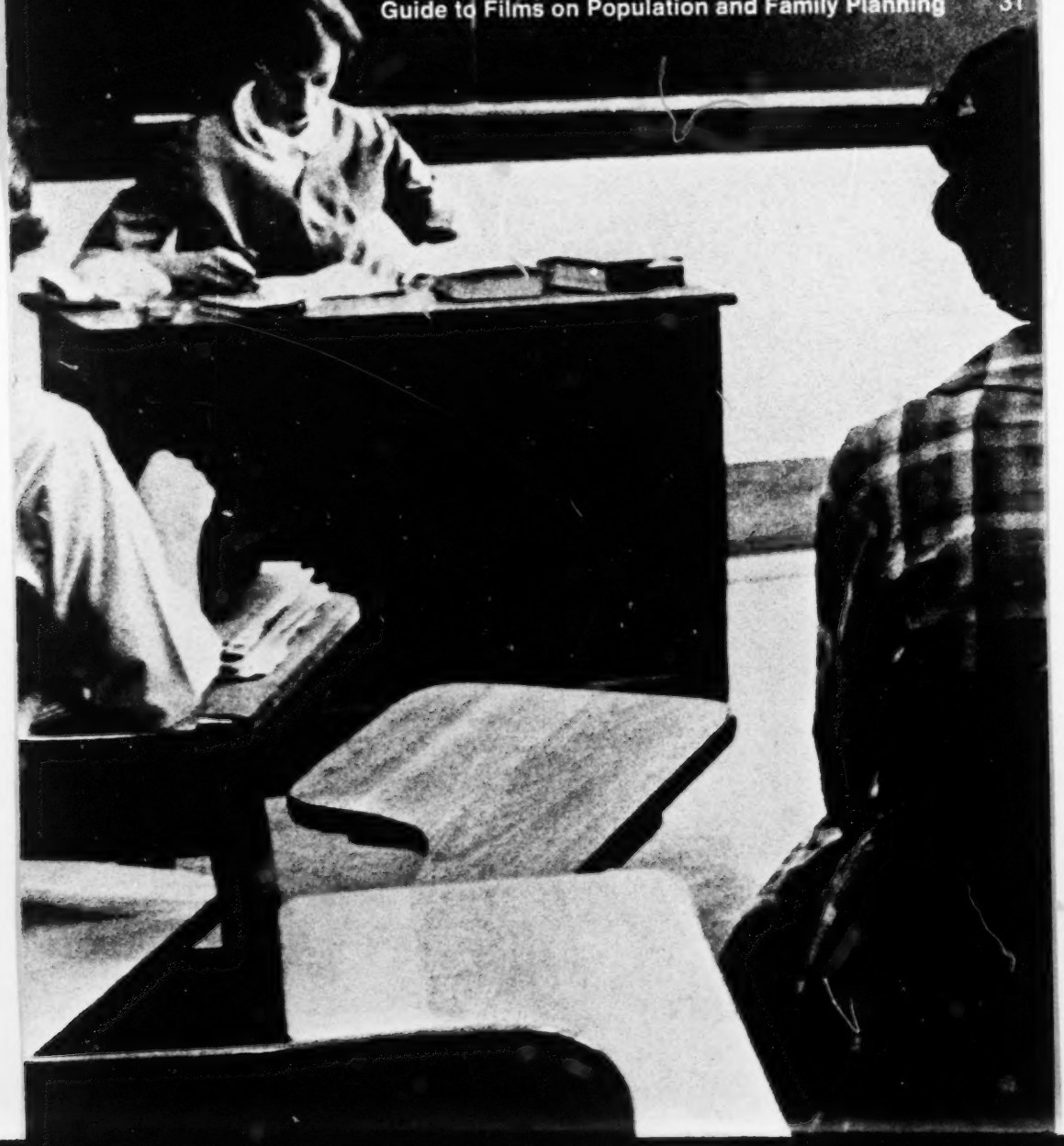

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Malthus and the Role of the American Classroom

Clarence Senior, Ph.D.,
Member, New York City Board of Education;
Professor of Sociology, Brooklyn College.

In 1775, one of colonial America's great patriots—the scientist and philosopher Benjamin Franklin—enunciated what has since become a basic tenet in demography. He said: "There is no bound to the prolific nature of plants or animals but what is made by their crowding and interfering with each other's means of subsistence. Were the face of the earth empty of inhabitants, it might in a few ages be replenished from one nation only, as for instance from Englishmen."

Almost a quarter of a century later, that quotation was picked up and included in a book which has been widely cussed and discussed, but seldom read. It is **An Essay on Population** by an Anglican minister turned political economist, Thomas Malthus. After quoting Franklin, Malthus went on to say: "Among plants and irrational animals the view of the subject is simple. They are all impelled by a powerful instinct to the increase of their species, and this instinct is interrupted by no reasoning or doubts about providing for their offspring. Wherever therefore there is liberty, the power of increase is exerted, and the super-abundant effects are repressed afterwards by want of room and nourishment, which is common to animals and plants, and among animals, by becoming the prey of others." These are powerful checks. Malthus continued by contrasting men to animals and plants: "The effects of this check on man are more complicated. Impelled to the increase of his species by an equally powerful instinct, reason interrupts his career and asks him whether he may not bring beings into the world, for whom he cannot provide the means of subsistence."

Basically what Malthus was pointing out was simply that the possibilities of human growth are infinite and the possibility of sustaining human growth is finite. The only way to solve the dilemma presented by these two collision-course tendencies is for the human being to exercise that faculty which distinguishes him from the animal world: reason.

Coping with the world population crisis requires men to exercise the one faculty distinguishing them from the other animals: reason.

Today Malthus' question demands reply more urgently than ever. In the reports that follow, specialists in varied academic disciplines seek to determine how the classroom can function to sharpen man's understanding of the population problem and to prod him effectively to the application of reason. The papers, based on a symposium held under the auspices of Planned Parenthood-World Population, open a discussion which, hopefully, will stimulate and guide concrete action within the foreseeable future.

Demographer and sociologist Philip Hauser places the problem in the framework of explosive world population growth and highlights the fact that though the schools have been gravely overburdened by population increases, their curriculum in no way reflects the population crisis.

Educator Sloan R. Wayland, who has studied educational systems here and abroad, gives documented evidence the problem is world-wide; everywhere schools lag in preparing students to understand this population problem and what man can do to solve it. Biologist Irwin R. Slesnick reports on an experimental high school program integrating instruction in population and family planning which show that the classroom can successfully handle the material.

How a committee of specialists can plan so that models may be multiplied and become generally accepted is the subject of physicist Jerrold R. Zacharias, who draws on the wisdom of a decade of successful action modernizing the science curriculum.

To these, we have added a report by Alan F. Guttmacher, M.D., president of Planned Parenthood-World Population, showing how initiative on the community level is already enriching teaching programs with population information and materials on family planning.

In the combination of these two approaches—the experts preparing models from above and the community initiating experimental studies from below—lies the promise of early achievement.

Planned Parenthood Affiliates, parent-teacher groups, community organizations with many areas of interest, working locally and improving the curricula of a single school, prepare the way for general progress and help to create a climate of acceptance for the curriculum proposals which will be recommended when the specialists conclude their deliberations.

As a member of New York City's Board of Education, I have long been interested in population problems, and in developing curricula which will enable young people both to understand them and effectively to deal with them. I would like to see our school systems tackle the many-sided problem of population growth just as we in New York have begun to tackle civil rights and civic responsibilities in our kindergarten through 12th grade curriculum.

Nationally, we are in the very early stage of discussing what should be taught and what can be taught. Our papers here represent the beginning of a much-needed exchange of experience and exchange of ideas on the basis of which we can move to a higher level of action.

Population Growth and Its Impact on U.S. Schools

Philip M. Hauser, Ph.D.,
Chairman, Department of Sociology, University of Chicago; Director of the Population Research and Training Center at the University.

U. S. secondary schools reflect the consequences of rising population in every way—crowded classrooms, teacher shortages, budgeting problems—except curriculum.

A glaring demographic inconsistency is visible in American education, particularly on the secondary school level. More than a decade's baby boom has inundated our school systems. But school curricula contain almost no reference to population trends. To me, this is most amazing. During the 50's, elementary school enrollment increased by approximately 50 percent. This did no great good for the quality and standards of elementary school education. The 50 percent increase in secondary school enrollment registered in the 60's, as the tidal wave of postwar babies reached high school, certainly is not improving the quality of high school education. A 92 percent increase is anticipated in college enrollment during this decade. This is the combined result of the population increase and the rising general trend toward higher education. Here, too, the quality of education is being affected adversely. No technique has been developed to increase the number of university professors of quality by 92 percent.

On a world scale, population is growing by some 60 million this year or two percent per annum. Thus the global census is increasing almost as much every three and one-quarter years as the present total U.S. population—some 195 millions. A two percent per annum increase, if continued, would produce one person for every square foot of land surface on the globe in six and one-half centuries. In fifteen and one-half centuries it would produce an aggregate population whose weight would match that of the planet itself.

Viewed against this background, it is clear that it is high time

to incorporate into the social studies part of secondary school education some basic demographic information. On the college level, more basic facts about population growth, population dynamics, and the implications of population growth are also needed. We may pay dearly for delays in incorporating population data in our school curricula.

The population problem has serious implications for mankind both in the short and in the long run. These implications may well affect the outcome of the cold war and certainly may determine whether developing nations will achieve their aspirations for higher levels of living. The question of war or peace may well hinge on just this issue.

Not only do our schools fail to grapple with these vital developments, but sex and family planning education are also, by and large, missing from the curricula. We have come a long way, particularly since World War II, in loosening up public consideration of these subjects. Now they are generally acceptable to the point where mass media—television, radio, newspapers and magazines—deal with them quite frankly. One of the most timid forms of animal life on this planet—I refer to the U.S. Congress—has actually been discussing aspects of this subject in its hallowed halls.

With public acceptance so general, it seems to me it is high time to take sex education and family planning instruction off the streets, out of the alleys, out of the locker rooms, out of the gasoline stations and out of automobiles into the classrooms.

Much can be gained from providing a setting in which the student in part will educate himself in association with his peers. How this material is introduced into courses of study affects schools, administrators, teachers, students and of course the community at large. Our method should be well founded on the experience already registered. A number of remarkable pioneering programs offer a point of departure. Supplementary teaching materials that would strengthen instruction and curriculum must be developed. Parents should be kept informed, with respect to sex and family planning education, at the outset at least. Parents and students should have the opportunity to opt for or against enrollment.

But curriculum advances require much more than sex and family planning instruction. General demographic considerations should be integrated into the social science curriculum on a factual basis, without indoctrination. We should expose the student to the gamut of opinions, attitudes and points of view that may be involved in problems where values are concerned. The many known facts about population dynamics can be related to education, to the economy and to the various aspects of society. It is a fact that most people in western civilizations control the birth rate; that there are variations in the extent to which religion is a

controlling factor; that there are no religious groups in the world that do not somehow restrict family size. It is a fact that even among the Roman Catholics in this country, 80 percent of all couples married 10 years or more restrict family size.

The task of the teacher is to indicate the different value systems and to stimulate thought. This can be done without indoctrination. To critics who fear that such a program would lead to an increase in sexual immorality, I would reply that research studies show that sexual behavior is little affected by instruction. Behavior is on the whole determined by morals and values and these, generally speaking, the student gets from many sectors of society, in addition to the school. The basic responsibility for their transmission remains with the family and the church and the many other social institutions which collectively mold the patterns of human behavior. Any failure on the part of these institutions to perform their functions should not detract from the school's responsibility to transmit the basic facts essential to the development of informed citizens, capable of responsible personal and societal behavior.

High school pregnancies are demonstrably more the result of ignorance than of too much information and education. Ample research documents this fact. If I were working on a strategy, I would insist on including in any population course consideration of the subject of population control. You cannot avoid it. The children bring the questions up themselves. Teachers can approach the question of control without discussing methods. My strategy would also be to establish optional courses in the most advanced schools with a favorable atmosphere and utilize their good experiences to expand the programs more widely.

How Schools Abroad Meet the Problem

Sloan R. Wayland, Ph.D.,
Professor of Sociology and Education, Teachers College, Columbia University; Director of the Population Instructional Materials Project.

Since 1965, I have been examining formal education systems in various parts of the world, particularly in countries with official family planning programs. Our project's objective was to see whether formal education might make significant contributions to family planning goals.

My experience has been greater outside than inside the United States. My study has taken me to some 10 countries. From it, I conclude that ours is a pioneering area of interest and that there is as yet no country in the world with a program which can serve as a model.

In connection with our project, we developed prototype instructional materials focused on two aspects. A document that we called "Teaching Population Dynamics" centered, as its name indicates, on the demographic dimension. It was designed, by use of a set of activities and of certain kinds of information, to communicate to students the significance of population growth rates, age structure and related factors affecting economic and social development. The second document, "Critical Stages of Reproduction," was designed to supplement biology textbooks. In most countries, including our own, these treat the reproductive system of the frog extensively but give only a paragraph about human reproduction. Only the most recent biology texts fix serious attention on human reproduction. By focusing on critical functions, we hoped we could set the stage for later consideration of the specific means of birth control.

We found around the world that educators, administrators of schools and teacher training institutions and community development workers—all of them—were interested and concerned about population. But they have not as yet taken serious steps to move to the development of teaching materials in their own society. The consequence of my visit, I think, was to raise questions of policy rather than to deal concretely with program specifics.

In the United States, however, growing interest in this field

Schools all over the world are backward in the development of curriculum about population problems and fertility control. Just about everybody is interested, but so far almost nobody has done anything systematic about it.

promised early action. Except for a small number of special instances, we have not yet moved forward. The American Sociological Association, in connection with the development of materials in its field, is now preparing some resource units in population. The newer biology provides for more specific treatment in regard to population and family planning. But these are still in the planning stage on the whole.

I wish to emphasize a point I consider more than a precious, hair-splitting detail. Sex education and family life education from my point of view are not equivalent or alternative phrases for population and family planning education. No consensus now exists on the meaning of these terms. Sweden's famed official sex education program, for example, gives little attention to population and birth control. Family life education with emphasis on the human relations aspects has been carried on in several schools here with little or no attention to population and family planning.

It is important then to emphasize that there is a current absence in our country and other countries of systematic attention in the schools to population and family planning, although there are activities in sex education and family life here and there.

Population may be looked at as both a national question and an individual family problem. The disjuncture is such that all efforts, including formal educational activities, have had difficulty in integrating the two. For some people, the individual family locus has been the major concern. These leaders have wanted to create a situation where each family would have only the number of children that it wants and have them when they are wanted. Under this approach, the number of children born in a particular family is not important, so long as the birth of each child is planned.

Special problems are presented by the poor family. Denied access to family planning, the poor often intensify their economic

difficulties by repeated unwanted pregnancies. The concept that they will welcome family planning when it is accessible and use it faithfully seems to be readily understood by many. However, the situation of the middle class family with the planned conception of four or five or more children does not seem a problem at all to large numbers of people. In its pure form, this approach may include a positive attitude toward the Indian family of a professional man who plans six children, but a negative attitude toward the Indian village family with five unplanned children.

Another approach focuses on the social consequences of rapid population growth. National family planning programs express this concern and become an important aspect of a national development program because the age structure and rate of population growth may lead to stagnation or even retrogression in national development, as the total Gross National Product fails to keep pace with the increase in human numbers. Under this approach, not only should families have only planned children, but the desired number should be reduced substantially. Appeals may be made in terms of desirable consequences for the individual family in terms of health, economic security, and the provision for the welfare of the children. However, the prerequisites for societal development and the related consequences for individual families move this problem into the public domain, so that those families who practice planning, as well as those who do not, will suffer if the rate of growth and age structure of the population are not significantly altered.

These two dimensions both need to be integrated or at least need to receive adequate attention in formal education as well as in other social structures. Schools must look at both dimensions. We may be able to integrate them in curricula or perhaps they must be seen as separate problems coming into curricula from different paths at different times.

Given the nature of educational enterprise, the first problem, it seems to me, is clear specificity about goals. Ambiguity multiplies difficulties. A clear appreciation of what formal education can do and cannot do (or at least what it can do only with extremely great difficulty) needs to be developed. If we look at the extensive educational research of the past several generations, one conclusion seems clear—that educational systems have been successful in developing a number of skills and in transmitting bodies of knowledge and information. As a consequence, certain types of values and attitudes have emerged.

However, the deliberate inculcation of attitudes and values is not a goal which has been achieved with great frequency, particularly not in our American community and particularly not in areas of human experience in which general societal attitudes and values

are different or run counter to those which the education system may be attempting to inculcate. I stress the phrase "deliberate inculcation." In the process of developing skills and imparting bodies of information, values and attitudes are often influenced. But they are heavily influenced by societal standards and are less by classroom control.

Hence, prevailing attitudes set limits on the goals eligible for inclusion in the curriculum and on what one may hope to achieve through the educational systems. We have examples of good curriculum but these are exceptional in terms of the basic structure of the American school. Most of the content in schools around the country is organized around well-defined subjects. The problem of innovation constantly confronts the question: how does this fit in with biology, with history, with language, with English, et cetera.

A further major problem awaiting resolution is whether the goal we have in mind can be institutionalized. Only to the extent that this is possible are goals feasible. This involves an assessment of what dimensions we can reasonably expect to become instituted in our society and in school systems nationally.

With reference to curriculum specifics, many types of activity can be carried on meaningfully within the school system relating to population study. Obviously there are limits, however, to which secondary school students will be able to engage in laboratory experience to extend the range of their understanding.

The strategy of bringing about curricular changes in the U.S. involves some understanding of the nature of the American educational structure. We have an image of a locally controlled enterprise. But it is useful to note the commonality of the educational structure throughout the country. This offers and creates both an asset and a liability. Good experience and good materials may be spread rather solidly throughout the society, once curriculum has a solid base—rather than having to depend on 20,000 different school systems to accept the materials. On the other hand, in the absence of a highly visible and controlled structure in the American educational system, it is difficult to go beyond the first stage and to get it moving from the experimental to the practical level of the national system as a whole.

The flexibility in the American system makes it possible for local school systems to initiate experimental programs. Such experience may serve as a basis for the gradual extension of programs to other schools. That is one way of moving. Organizationally, another role suggests itself: the searching out of means for a large scale attack to effect curriculum changes nationally in the same way that has been employed with other teaching disciplines. The establishment of a broad sponsoring group for this undertaking might be effective.

A Model Unit in One American School

Irwin L. Slesnick, Ph.D.,
formerly of Ohio State University;
Associate Professor of Biology
and Director, Science Education Center,
Western Washington State College.

A unit entitled "Population Expansion and Birth Control" was taught to a group of 35 high school seniors during a three-month period in 1962 at the Ohio State University experimental school. The students were mature and sophisticated—the average IQ of the group being about 120. They were poorly informed about the facts of sexuality and reproduction. They were of an age that contemplates parenthood yet they possessed little knowledge about family planning. Population dynamics had not been studied by this group previously. The unit afforded an excellent vehicle for teaching and reinforcing basic concepts in sociology, biology and even mathematics.

The faculty felt that the problems of excessive population growth and population control are of considerable social and personal concern, and must become part of general education. Knowledge of the problems caused by rapid population growth and of unplanned pregnancies should help generate rational behavior when, as adults, the students confront related problems.

We also postulated a reduction in the number of accidental premarital pregnancies without doing violence to the morality of the community. To be sure, requests for assistance in planning senior level studies in family planning had been stimulated by pregnancy epidemics in high schools.

An ideal curriculum for one grade level integrates appropriate and planned experiences that occur on preceding levels and prepares the student for those to follow. Good programs in sex education, for example, develop in phase with the maturation of the individual.

However, one characteristic of our jerrybuilt school system is backward building—the revolution in science curriculum, for example, began with senior level physics and has been proceeding toward the primary grades. The absence of a kindergarten through 12th year program in sex education does not preclude a senior study. The condition, however, is quite frustrating for it is neces-

A teaching unit exposed high school students to many points of view on the world population crisis.

sary to teach these sixteen, seventeen and eighteen year-olds concepts that they should have learned in their formative past. High school seniors are by then already rather rigidly conditioned in their sexual behavior.

I planned, taught and coordinated the unit for 35 high school senior boys and girls. The class met one hour daily for three months. Later in the same school year, a woman teacher undertook a refined unit with a class of high school juniors. Since then, this course has been taught annually by different instructors. Each used different procedures and content.

The first study had the active cooperation of the staff, the clearly expressed support of the administration and the tacit approval of the parents. We did not ask the parents if they would approve of our instituting a unit in population and birth control. They were informed of the unit by letter, along with other items of senior class student-parent business. They were accustomed to innovation in this school.

In the unit's first phase, students were introduced to the history, causes and dimensions of human population fluctuations and to the economic, political, psychological, moral, health, aesthetic and education problems associated with population expansion.

Problems of stabilizing the world population especially with respect to certain biological concepts were emphasized. The presentation was 95 per cent adrenalin and five per cent material. The intention was to innoculate the students with an urge to search the literature for information. They were specifically directed to read broadly on the subject of population and to request needed resources which they could not find on the shelves. They were also directed to record their questions.

The students soon found out that material about human reproduction and methods of fertility control was not readily available to them in the school library or in the public libraries. Columbus, Ohio school libraries did not possess books and pamphlets with

such information. They found they were not permitted to examine books about population control in the libraries. Ecological and evolutionary concepts of population were not clear to them.

The next task was to teach the biological aspects in the classroom. The first objective of the second phase was, through a series of lectures, to provide essential information about human reproduction and population control. This was really the group's first formal exposure to sex education. What they knew, they had learned mostly at pajama parties and in locker rooms. I felt it very important to establish an adult-to-adult atmosphere that would enable free inquiry and minimize personal embarrassment. The approach that I took was to attempt to achieve a rapport by conducting an analysis of the expletive and metaphorical use of the Anglo-Saxon terms referring to reproductive and eliminatory functions. We analyzed the emotional impact of four-letter words. We did not actually come out in the classroom and use them. But we referred to them and discussed their impact. The open discussion of this schizoid cultural condition had the intended effect of creating a sophisticated adult atmosphere for subsequent discussions of delicate topics.

The third phase was designed to present facts of the human reproductive anatomy and physiology. Integrated with these lectures was the technology of birth control. One administrative restriction was that no devices be brought into the classroom. Therefore, we depended very much upon drawings. Other topics considered were birth, death and survival within populations of plants and animals. Specific illustrations, with implications for man, were given for phenomena of reproductive potentials, overpopulation and limiting environments, functional change of adaptation, energy capture by organisms and food production.

Students then were asked to identify the specific problems and issues which they would like to explore and have explored. A number of experiences were contrived to confront them with a range of viewpoints. The procedure here was, for example, to acquaint them with the work of Hudson Hoagland dealing with the effects of high population density on rats and rabbits. The students then jumped to the conclusion that the human population would experience the same pathology if population density continued to rise.

But as soon as we had done this, we confronted them with a sociologist, who very strongly urged them not to overgeneralize the fact that because rats and rabbits behaved one way under population stress, human beings will necessarily do the same.

We contrived situations that swung the students from one view to another. We showed a kinescope of discussion among three clergymen and a scientist of problems of morality. The executive

secretary of the Columbus Planned Parenthood discussed Planned Parenthood-World Population goals and activities. A proponent of the view that overpopulation is a wholesome stimulus to progress visited the classroom. A social studies teacher discussed conflicts among people as they do and do not interrelate with expanding population pressures. A priest answered questions about the Catholic Church's position regarding birth control.

In the final phase, individual students made brief oral presentations of their research and defended their positions.

One might claim that the unit was successful because parent reaction was all positive; the faculty and administration of the school decided to repeat the unit for successive years; the students hailed the study as informative on subjects that were of great concern to them, or because there were no vocal protests from those members of a community who usually oppose study by teenagers of controversial issues and sexual reproduction. But the truer measures of success will be revealed in the behavior of the students in marriage and in many decision-making roles in their adult world.

The members of this class were asked by a mailed questionnaire to evaluate the study now that several years have passed. In their responses each student reaffirmed the value of the study as a part of the preparation for responsible parenthood. Many noted how shallow, naive and ignorant their peers appeared to be about individual and social responsibilities in matters of human sexuality.

Revision of the Science Curriculum Points the Way

Jerrold R. Zacharias, Ph.D.,
Professor of Physics, Massachusetts Institute of Technology; served as chairman of the Panel on Educational Research and Development, President's Science Advisory Committee.

Our success in revising the physics curriculum is reflected in many American high schools, where approximately 200,000 pupils were studying under the new program in 1965. The figure mounts to 400,000 when students in all parts of the world are counted. In the U.S. this number is rising at the rate of 10 per cent a year. Abroad it rises regularly, too. Only in England, France, Germany, and New York City is the modernized course of study not yet adopted. Preparation took ten years and we were aided by an army of specialists with a sharp focus on goals. We knew exactly what we were trying to do. Nevertheless, every step of the way was sweat, blood and tears. We would argue incessantly in an effort to achieve full clarity.

How can our experience help prepare a plan for curriculum revision in the field of population and family planning? The general demographic problem can be handled as an issue in social studies, but family planning is something else.

In physics, biology, chemistry, mathematics and other subjects with which we have already been successful, we set ourselves the goal of collecting learning aids to help the student transcend the teacher. We believed then, and do now, that children and teachers are brighter than many people think. Teachers are deeply interested in making the learning process work, but they are helpless without materials.

In physics we developed "learning aids" for the students' hands, eyes and ears to multiply the learning opportunities. Collecting learning aids requires direct confrontation of the phenomena. In physics, that is easy compared to other subjects. We decided to emphasize optics and light in the beginning. We did this simply because we wanted to hold the interest of girls. Mechanism and mechanics have blunted their interest in physics for centuries. We chose topics that would permit them to reason and learn through observation. The particular topic chosen is not decisive: the im-

Despite obvious differences in content and essential treatment, important lessons can be drawn from the high school physics curriculum and applied to introducing population and family planning materials into the schools.

portant thing is that the student understand it—then the teacher will.

After you have made a decision about subject, you try to make books—textbooks. Education is over-dominated by the written word. But texts are important and helpful in codifying study, and more than texts is needed. We supplemented with many laboratory experiments and guides to experiments. In addition we supplemented with educational movies. This is not easy; it is expensive in dollars and in human patience. We made guide books for teachers. We told why we included what we included and why we did not include what we omitted. We provided collateral readings. We prepared teacher training programs. We outlined and held institutes for teaching and training teachers.

To accomplish these objectives, experienced teachers are required to help in training. This is very expensive, too.

If I were responsible for planning how to bring improved education in family planning to the young adolescent population of the world, I would first convene a tough-minded group of about thirty people for three months to explore this problem. I have in mind experienced people, people who have fought out matters of principle and are bold enough to risk being found in error. This is not a task for timid planners. I suggest thirty because I know thirty is a manageable number and probably the outer limit of the manageable. The committee must work over a consistent period and not be hurried. You have to have people from many organizations and from different disciplines, but representing only themselves—some of them classroom people, some with school administration experience; some really worried about morals and even some who have lived by trying to indoctrinate morality. After intensive debate and discussion, there emerges not a consensus but a small group really prepared to hammer out the rest of the material. We have done this in various academic dis-

ciplines with impressive results.

What special materials would be needed to bring birth control and family planning effectively into secondary school curriculum? That would have to be determined. Thought should be given to using Alan F. Guttmacher's **Complete Book of Birth Control.** Its applicability might be a suitable beginning theme for the proposed thirty-man committee to begin its three-month study.

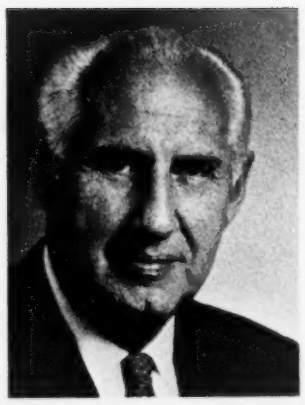
The next task is the business of getting enough classes going—not just one, but at least twenty, to produce a nucleus of teachers. If one starts with twenty teachers and each teacher teaches two teachers, you have every teacher in the world taught eventually. This is how exponentials work, as demographers know.

I am generally opposed to classroom requirements in this connection. Compulsory uniform materials somehow kill the program. First class materials should be salted in every school system. It is easy enough with non-controversial subjects. In preparing science and mathematics materials for tropical Africa, we faced the problem of getting teaching guides around. In early stages, we bring in those who are going to teach it—teachers, and teachers of teachers, and people who will become teachers of teachers of teachers. Never allow teachers to teach teachers if they do not also teach children.

Some will say about demography that the manageable way to start teaching this is with the younger children. Others will be impatient and prefer to begin with the students in high school. There need be no one set way only. There can be many. Some of us who started this change in the physics program almost ten years ago began at high school level because we felt experienced there. We knew the students; they were not too different from the college freshmen we were teaching. We knew the subject; it was close to us. I can now say that we understand the teaching of science and mathematics to the very young. However, it took us five years to get there in mathematics and eight years to get there in the sciences. We still lack good data documenting the validity and effectiveness of our teaching systems.

Courses of study in population and family planning will differ from each other, and from our science courses, but many of our experiences should be helpful. A broadly representative committee with commitment should be able to establish the beginnings of a national program of school curriculum in population and another in family planning, which, with the support of educators and the public, will eventually find acceptance on the same basis as our changes in the school science programs.

How Communities Can Take Initiative Now



Alan F. Guttmacher, M.D.,
President,
Planned Parenthood-World Population;
author of
The Complete Book of Birth Control;
Babies by Choice or by Chance;
and **Pregnancy and Birth.**

Education about population problems and family planning is already in demand at America's grassroots. Scores of schools are experimentally introducing appropriate curricula. Many more await only community encouragement and professional assistance.

It will take more than ten years for a national panel of specialists to debate, test and complete recommendations for secondary school curriculum revision to give proper emphasis to population problems and family planning. But American schools need this guidance sooner; they need it now. The same revolution in attitudes which has caused state legislatures to demolish long-standing legal taboos and has led official health and welfare departments to adopt positive family planning policies has reshaped thinking at the community level as well and made this an urgent matter.

Many schools are looking for help. Administrators, principals and teachers are responsive to program proposals. In individual schools some are already experimenting in selected classes. Planned Parenthood Affiliates are in close touch with these developments. Their activities awaken school interest in the world population crisis and the role of fertility control in coping with it. As a result educators ask them for guidance, outlines, publications, textbooks, recommended reading lists, film suggestions and speakers. The classroom study units that emerge vary widely in scope, level and approach; only their common concern with demography links them. Not all touch on family planning.

Planned Parenthood welcomes individual school and class initiatives. The wider the network of local enterprise in curriculum revision, it would seem, the more receptive the national acceptance for the over-all plan the experts are to prepare. Moreover, local

projects yield experiences adaptable by other innovators. The existence of programs, even on a limited and trial basis, speeds the preparation of syllabi, methods, bibliography and other teaching resources. Need is the spur. Once educators have tasted success in such pioneering, they become missionaries to those unconvinced among their fellow school men.

A national report card would still record a below-passing grade for American high schools on the extent to which demography and associated social and economic problems have been incorporated in classroom instruction. But already their grade is well above zero. Programs do exist. Model units make it possible to say explicitly: These subjects can be taught in high school without public controversy and with immediate benefit to students.

The California Congress of Parents and Teachers, early in 1966, adopted a declaration supporting access to family planning guidance and services for all and urged that family life education be included in classroom study. "Far from being 'frills,' adequate courses, of which there are very few, would at least give early marriages a better chance of success," Mrs. Robert Kleinhammer, Director of Family Life Education of the California PTA commented during the Congress debate.

In Chicago, high school departments of biology and sociology regularly invite Planned Parenthood speakers to lead discussions. The population explosion is the central theme. The Encyclopedia Brittanica film **Population Ecology** is often shown. In one suburban school, six biology classes heard such discussions and viewed this film in 1965. Several Catholic schools also invited Planned Parenthood representatives to address biology classes.

Various approaches widen interest. For several years, Planned Parenthood of Maryland has distributed curriculum revision suggestions and resource materials from its booth at the State Teachers' Convention.

In 1965, from an exhibit centered on the theme "What To Teach About the Birthquake," they distributed reprints of Professor Irwin Slesnick's article about curriculum from **The Biology Teacher** (see p. 24). A Planned Parenthood spokesman has been a frequent guest speaker in Baltimore high schools—public and private—on the population crisis. In addition, this leader confers with key school officials who express interest in discussing curriculum on population and family planning topics. In Maryland, the approach seems to stress the inclusion of such study at all levels rather than a "one course" or "one lecture" sampling.

In Nassau County, N.Y., Planned Parenthood essay contests at local colleges have become an official part of campus life. The C. W. Post College Spring, 1965 catalogue listed the competition and Hofstra University was to make its first awards in spring

1966. Expansion of the essay contest to cover all Nassau colleges is projected. In Kershaw County, S. C., high school classes in family living participate in Planned Parenthood essay contests. An experimental teaching program has been under way in a Washington, D. C. high school senior class for several years with Planned Parenthood cooperation.

Hundreds of teachers in such scattered localities as Castro Valley, Calif., Indianapolis, Ind., Nanuet, N. Y., Plymouth, Mich., Townsend, Mass., and Cincinnati and Kettering, O., have already mounted individual programs of their own. The assignment in one humanities course in California, although not typical, is of particular interest. Students were asked to assume they were members of the County Board of Supervisors in a community where the Welfare Department had requested that funds be budgeted for birth control information and contraceptive devices for public welfare recipients requesting such help. To guide the student, the teacher provided background information and the assignment called for a reasoned position in favor of a yes or no vote.

Among the courses in which population and/or family planning study units are currently being included are biology, health education, sociology, conservation, American history, geography, economics, English, speech and family living. Many students write to Planned Parenthood nationally and locally for assistance with term papers. Teachers sometimes offer a choice of theme titles and include population and family planning and this topic is being preferred by a rising number of students. Demands for materials also originate in classes. Students often have free option to select their own term paper themes. Of 60 who sought aid from Planned Parenthood nationally, more than half said choice of the subject was their own idea and that they had obtained teacher approval in advance.

Predictably, high school biology reflects the new trend more than other courses. Biology classes are responding to local initiative while a committee of experts grapples with the curriculum problem at the top level. The steering committee of the Biological Sciences Curriculum Study (BSCS) which has been revising program content since 1960, has officially recommended to faculties that more information on human reproduction and population be included in courses and texts.

Three 10th grade biology texts with associated laboratory guides and teachers manuals, prepared by the BSCS and published in 1963, contain information on human reproduction. Their revision, scheduled for the summer of 1966, will add further information on reproduction and introduce material on population, according to William V. Mayer, director of BSCS. The three volumes are: **Biological Science: Molecules to Man** (Houghton

Mifflin, New York); **Biological Science: An Inquiry into Life** (Harcourt, Brace & World, New York) and **High School Biology**, BSCS Green Version (Rand McNally & Co., New York).

Concern with problems arising from human population growth has prompted the Elementary School Science Project to seek to develop a unit on population dynamics. This project is funded by the National Science Foundation and Professor Herbert L. Mason, Botany Department, University of California at Berkeley, is its chairman. Two classroom trials have been carried out, according to Professor Robert C. Stebbins of the University of California, project chairman. Under his direction, a cage for photographically recording population changes in fruit flies has been in preparation.

"We have learned that the children are interested in the flies and are greatly impressed by their explosive growth in numbers," Professor Stebbins reports. "We expect to compare mortality and natality factors with those found in man." This project is expected to yield published results in a year or so.

Thus, the developing national pattern includes considerable individual initiative by teachers and school administrators in the population-family planning realm. There is good evidence of a framework of sympathetic parental interest. Fear of community controversy need no longer be a deterrent. Here, distilled from the experience of Planned Parenthood Affiliates and other organizations, are some procedural recommendations, which may be helpful in strengthening community action on curriculum revision:

1. Educators and citizen advocates of population and family planning secondary school study units will both find it beneficial to consult with each other in advance of taking specific initiatives. Educators may count on finding community supporters, especially if there is a Planned Parenthood Affiliate in the locality. Lay leaders progress most effectively when they have familiarized themselves with courses already being offered and programs in preparation.
2. Sometimes an essay contest is the simplest way to begin to evoke school interest and student and teacher participation. The presentation of the award offers a further opportunity for evoking academic support.
3. To the extent that they indicate interest, offer resource materials to teachers and community leaders. Utilize the Planned Parenthood general publications list, the professional publications list and the bibliographies as prime resources.
4. Popularize programs developed in schools with previous practical and successful experience.
5. Encourage advocates of curriculum revision to be active in

parent-teacher groups. Often faculty members, ready to innovate demographic study, meet uninformed opposition.

6. Seek out local teachers active in professional studies of curricula reform. With encouragement, they may undertake to introduce the material locally. Wherever possible, document the need for demographic information from local as well as national and international sources.
7. Utilize the city and state teachers' conventions to display materials and resources. Take a registry of those who say they would like to know more and share resources with them.
8. Organize a qualified speakers' committee to address community groups. Prepare a speaker's outline that will make it easier for intelligent but busy volunteers to organize their addresses.
9. Circulate an offer to elementary and high school principals, teachers of biology, health education, social studies and related subjects to send speakers and films on population and family planning on request. If resources permit, circularize private as well as public schools. Often a successful private school program accumulates the experimental experience on the basis of which public and parochial schools will act.
10. Work with the local library in promoting at least once-a-year displays of books and other materials on population and family planning. Gathered in a central spot, highlighted by attractive new reprints and publications from magazines and voluntary and official organizations these can make an impressive exhibit. Such items can also be obtained from Planned Parenthood, the U. S. Department of Health, Education & Welfare, the U. S. Public Health Service, the Children's Bureau, the Department of the Interior, and the State Department's AID program. Invite teachers' cooperation in assigning related themes and reports.

Suggested Books, Pamphlets and Articles

Population Problems

*POPULATION EXPANSION AND BIRTH CONTROL—An Appropriate Problem for High School Study, Irwin Slesnick. Reprint from *The American Biology Teacher,* details one unit's design. (PP-WP, 10¢)

THE GROWTH OF WORLD POPULATION (publication 1091) National Academy of Sciences, Washington, D. C., 1963, $1.00. Written by a committee of the nation's top scientists, addressed to other scientists and to a general audience.

*GROWTH OF WORLD POPULATION. Introduction, conclusions and summary statement excerpted from the National Academy of Sciences report Washington, D.C., 1963.

(PP-WP #598A, 10¢)

THE GROWTH OF U. S. POPULATION (publication 1279) National Academy of Sciences, Wash., D.C., 1965, $1.25. A study of U.S. population problems.

*BIRTH CONTROL: ACADEMY REPORT. Excellent condensation, reprinted from the magazine *Science* of the National Academy of Science's 1965 Report, *Growth of U.S. Population.* (PP-WP #303, 10¢)

POPULATION PERSPECTIVES, Philip M. Hauser, Rutgers Univ. Press, 1960, $3.50. A brief and clear introduction to the patterns of world and national populations.

POPULATION: THE VITAL REVOLUTION, Ronald Freedman, ed. Doubleday-Anchor, Garden City, N. Y., 1964, $1.25 (paperback). Nineteen experts analyze important world population trends in non-technical language.

THE POPULATION DILEMMA, Edited by Philip M. Hauser. Prentice-Hall, Englewood Cliffs, N. J., 1965, $3.95 ($1.95 paperback). Well-balanced picture by eleven authorities of population trends and prospects in the world as a whole.

POPULATION, William Petersen, Macmillan, N. Y., 1961, $7.95. An introduction to demographic concepts and description of population phenomena of U. S.

POPULATION, EVOLUTION AND BIRTH CONTROL—A COLLAGE OF CONTROVERSIAL READINGS, Edited by Garrett Hardin. Freeman, San Francisco, 1964, $2.00 (paperback). Collection of the most effective published statements in support of and in opposition to the questions at issue, arranged to reveal the historical development of major ideas.

*Available from PP-WP. Use number where listed. Where price is omitted, item is free. Reduced prices are offered for orders in volume.

THE PRINCIPLE OF POPULATION, T. R. Malthus, 1798. E. P. Dutton, N. Y.—Everyman's Library, 1958 reprint, two volumes, $1.95 each. Basic book for student of demography.

POPULATION GROWTH—THREAT TO PEACE? Edited by William E. Moran, Jr. from papers of the 37th Annual Conference of the Catholic Assn. for International Peace. P. J. Kenedy & Sons, N. Y., 1965, $4.50. Special attention is given to the Catholic position on birth control and to suggested patterns of reconciliation between diverging views.

AMERICANS AT MID-DECADE, Series P-25, No. 16, January, 1966, U. S. Dept. of Commerce, Bureau of the Census, Population Division, 40¢. (For sale by the Superintendent of Documents, Wash., D.C.) Good source for facts about characteristics of the U.S. population in 1965.

*POVERTY OF ABUNDANCE. A study of the cost in human deprivation, national economic and social development and dollars and cents of uncontrolled population growth abroad and in the U.S. (PP-WP #500, 50¢)

*NEGRO FERTILITY AND FAMILY SIZE PREFERENCES, Implications for Programing of Health and Social Services, A. C. Hill and F. S. Jaffe. Reprinted from *The Negro American* (Daedalus Library Vol. 7, Ed. by T. Parsons and K. B. Clark.) Houghton Mifflin, New York, $9.50. A resume of research studies showing that, like other sections of the U.S. population, Negroes will accept and use faithfully family planning methods consistent with their religious beliefs and mores; explodes the myth that sexual practices of Negroes and whites differ widely. (PP-WP, 15¢)

Quality of Life

POPULATION DYNAMICS, John Cairns Jr., Rand McNally, Chicago, 1966 (Patterns of Life Series) $1.20. Gives good, brief explanation of traits of populations; population measurements, density, composition; organisms and environments; and a discussion of the Malthusian principle.

THE PROBLEM OF PEOPLE, Roger Revelle, reprint from *Harvard Today,* Autumn 1965, Harvard University Center for Population Studies, 9 Bow Street, Cambridge, Mass. 02138. Discusses whether man will learn to control the quality of life. Also available, with suggestions for teaching, in *Nature and Science* (Teacher's Edition), Vol. 3, No. 11, 2/21/66, American Museum of Natural History.

*300,000,000 AMERICANS WOULD BE WRONG, David E. Lilienthal. (Reprint from *N.Y. Times Magazine,* 1/9/66) The Chairman of Resources & Development Corporation asserts that

the quality of individual life is threatened by overpopulation and urges action to solve this problem. (PP-WP #545, 15¢)

*BIRTH CONTROL: THE SOLUTION TO THE POPULATION CRISIS, W. D. McElroy. (Reprinted from *The Johns Hopkins Magazine,* May 1936) A distinguished scientist discusses population control, the reasons why the issue must be faced, and the feasible solutions. (PP-WP # 701, 10¢)

PEOPLE! William Vogt. William Morrow, N.Y., 1960, $4. (paperback 50¢.) Discusses what excessive population growth does to such human aspirations as the pursuit of happiness.

*TOO MANY AMERICANS, Lincoln & Alice Day. Houghton Mifflin, Boston, 1964. $3.50. Presents the meaning of population growth in the U. S. (Paperback: Delta, $1.95)

OUR CROWDED PLANET, edited by Fairfield Osborn. Doubleday, N. Y., 1962, $3.95. A collection of essays bringing into focus the immediacy of the population problem.

THE POPULATION CHALLENGE. U.S. Dept. of the Interior Conservation Yearbook No. 2, 1966. (For sale by the Superintendent of Documents, Wash., D.C. $1.25.) Are our natural resources on a collision course with an expanding population?

*FAMILY PLANNING—A Special and Urgent Concern, the Rev. Martin Luther King, Jr. An examination of its role in the Negro's quest for security and a decent life. (15¢)

Family Planning

*PLANNING YOUR FAMILY, THE COMPLETE GUIDE TO CONTRACEPTION AND FERTILITY, A. F. Guttmacher with W. Best and F. Jaffe. Macmillan, N.Y., 1964, $5.95. A comprehensive handbook on birth control.

*THE COMPLETE BOOK OF BIRTH CONTROL, A. F. Guttmacher with W. Best and F. Jaffe. Ballantine, N.Y., 1961. Brief paperback manual on birth control. (PP-WP #547 50¢)

*A NEW CHAPTER IN FAMILY PLANNING, Elizabeth Ogg, Public Affairs Pamphlet, N.Y., 1964. A summary of the benefits of family planning, the physiological principles involved and the available methods. (PP-WP #806 25¢)

*TO BE A MOTHER . . . TO BE A FATHER. Simple illustrated explanation of human reproduction and how methods of contraception function. Prepared originally by Dr. W. Fritz, Director of the Health Dept. of Accomack and Northampton Counties, Virginia, adapted for wider use by PP-WP Medical Dept. Rev. 1965. (PP-WP #590) Spanish version, Ser Padre Ser Madre (#590S 10¢)

*Available from PP-WP. Use number where listed. Where price is omitted, item is free. Reduced prices are offered for orders in volume.

*FAMILY PLANNING IN THE DEVELOPING NATIONS– the story of the many new population programs under way in nations around the world and the part of the International Planned Parenthood Federation in their operation.
(PP-WP #846, 15¢)

Religious Opinions

GENERAL

SEX WAYS–IN FACT AND FAITH, Bases for Christian Family Policy, edited by Evelyn M. and Sylvanus M. Duvall. Association Press, N. Y., 1961, $3.95. Summarizes and evaluates the vast amount of data and clinical evidence now available on sex and marriage in the context of changing tradition and thought.

THE POPULATION EXPLOSION AND CHRISTIAN RESPONSIBILITY, Richard M. Fagley. Oxford University Press, N. Y., 1960, $4.25. Discussion of the church's growing awareness of the population problem, governmental neglect, religious obstacles and the need for a clear stand.

RELIGION AND BIRTH CONTROL, Edited by John Clover Monsma. Doubleday, N.Y., 1963, $3.95. Symposium of Protestant, Jewish and Catholic physicians discuss ethics of contraception, abortion, artificial insemination and related subjects.

CATHOLIC THOUGHT

*CATHOLICS AND BIRTH CONTROL, CONTEMPORARY VIEWS ON DOCTRINE, Dorothy Dunbar Bromley. Devin-Adair, N. Y., 1964, $3.95. Forewords by Richard Cardinal Cushing and John L. Thomas, S.J. Prime reference on recent developments in the position of the Roman Catholic Church on responsible parenthood.

*THE TIME HAS COME, J. Rock. Alfred Knopf, New York 1963, $3.95. The Catholic scientist and co-developer of the oral contraceptive pill, examines Catholic doctrine in the light of the population crisis and recommends a program for united action by Catholics and non-Catholics. (Also in Avon paperback, 75¢.)

CONTRACEPTION AND CATHOLICS, A New Appraisal, Louis Dupré. Helicon, Baltimore, 1964, $1.95. Important contribution to developing Catholic thought on birth control, maintaining that in addition to an unchangeable element in natural law there is also an evolutionary aspect based on the reality of a developing human nature.

Sex Education

HUMAN SEX AND SEX EDUCATION, PERSPECTIVES AND PROBLEMS, Warren R. Johnson. Len & Febiger, Philadelphia, 1963, $5.00. Presents problems and theories of sex education in our society.

SEX AND THE COLLEGE STUDENT, Report No. 60, Group for the Advancement of Psychiatry, N.Y., 1965, $1.50. Suggests guidelines for understanding and formulating policy toward student sexual behavior in the college setting.

*MARRIED TEEN-AGER, M. S. Calderone, M.D. (Reprinted from the *Journal of the International College of Surgeons,* Vol. 43, No. 4, April 1965). A useful roundup of professional studies on this question, of particular interest to physicians, youth-serving agencies, parent-teacher groups, educators and clergymen. (PP-WP #795, 15¢)

*ADOLESCENT SEXUAL BEHAVIOR, M. S. Calderone, M.D. The role of parents and educators in improving sex education for adolescents is outlined in this reprint from the *National PTA Magazine.* (PP-WP #768, 10¢)

*SEXUAL ENERGY—CONSTRUCTIVE OR DESTRUCTIVE? M. S. Calderone, M.D. (Reprinted from *Western J. of Surgery, Obstetrics and Gynecology,* 71:272-277, Nov.-Dec. 1963). Stresses the interconnections of sexual processes with mind and emotion and the need for better sex education. (PP-WP #736, 20¢)

*HEALTH EDUCATION FOR RESPONSIBLE PARENTHOOD: PRELIMINARY CONSIDERATIONS, M. S. Calderone, M.D. (Reprinted from *A. J. of Public Health,* Vol. 54, No. 10, October, 1964, pp. 1735-1740). A forthright statement on the role of health education in dealing with problems of population, planned parenthood, and responsible sex education. (PP-WP #775, 10¢)

Research

*100 UNANSWERED QUESTIONS by Carl G. Hartman. One of America's top scientists isolates some of the most important unsolved problems in human reproduction and contrasts the relatively small expenditure on research in these areas with the investments in such fields as military technology and space. A reprint from *McCall's,* Sept. 1964. (PP-WP #763, 10¢)

*PHYSIOLOGY OF REPRODUCTION AND ITS RELATION TO THE REGULATION OF FERTILITY, W. O. Nelson, M.D. (*Marriage and Family Living,* Vol. XXV, No. 1, Feb. 1963). A concise survey of those areas of physiologic research that show promise of developing new methods of fertility control. (PP-WP #733, 10¢)

For Children and Young Adults

LOVE AND SEX IN PLAIN LANGUAGE, Eric W. Johnson. Lippincott, Philadelphia, 1965, $2.95. All there is to know about sex in language easy enough for the ten-year-old, with ideas and information; useful even to college students.

*Available from PP-WP. Use number where listed. Where price is omitted, item is free. Reduced prices are offered for orders in volume.

Age 9-12

A STORY ABOUT YOU: THE FACTS YOU WANT TO KNOW ABOUT SEX (9-12). The Dutton Series on Sex Education. Marion O. Lerrigo and Helen Southard in consultation with Milton J. E. Senn, M.D., E. P. Dutton, N.Y. $2.00.

THE WONDER OF LIFE. Milton I. Levine, M.D., and Jean H. Seligmann. Simon and Schuster, N.Y. $2.95.

For Teen-Agers

FACTS OF LIFE AND LOVE FOR TEEN-AGERS, Evelyn Millis Duvall. Association Press, N.Y., 1956. $3.50.

HUMAN GROWTH. Alice V. Keliher. Appleton-Century-Crofts, N.Y. $2.25.

WHAT'S HAPPENING TO ME? Sex Education For The Teen-Ager (12-15). The Dutton Series on Sex Education. Marion O. Lerrigo and Helen Southard in consultation with Milton J. E. Senn, M.D., E. P. Dutton, N.Y. $2.00.

For Young Adults

LEARNING ABOUT LOVE: SOUND FACTS AND HEALTHY ATTITUDES TOWARD SEX AND MARRIAGE (16-20). The Dutton Series on Sex Education, Marion O. Lerrigo and Helen Southard in consultation with Milton J. E. Senn, M.D., Dutton, N.Y. $2.00.

WHEN YOU MARRY, Evelyn Millis Duvall and Reuben Hill. Association Press, N.Y. $4.50.

The Law

*SEX VS. THE LAW by Harriet F. Pilpel. PP-WP's General Counsel summarizes archaic Federal and state sex laws, including those affecting birth control, and contrasts them with prevailing practice and attitudes in this reprint from *Harper's Magazine*, 1965. (PP-WP #783, 15¢)

*PP-WP AMICUS CURIAE BRIEF. A good short summary of the legal status of birth control and supporting data from many fields is included in this brief submitted in connection with the challenge to the Connecticut anti-birth control law. (PP-WP #378, $1.50)

FOR FURTHER READING AND INFORMATION

Publications Lists and Bibliographies

*LIST OF PP-WP PUBLICATIONS FOR PROFESSIONALS (1966). Materials for professionals available from Planned Parenthood-World Population; covers contraception, infertility, abortion, research, poverty and family planning, administration of family planning services, policy statements, population and natural resources, the law, and other subjects. (#100B)

*PUBLICATIONS ABOUT PLANNED PARENTHOOD (PP-WP Publication). Materials for the general public; covers birth control, religious attitudes, marriage & family life, infertility, world population, public policy, research and general information. (#100A)

*SELECTED BIBLIOGRAPHY ON FAMILY PLANNING FOR PROFESSIONALS—Books on contraception, infertility, abortion, the population problem, demographic research, family planning surveys and programs, poverty, religion and birth control, sex and marriage education. (#100C)

BIBLIOGRAPHY OF FERTILITY CONTROL 1950-1965, C. Tietze, M.D. (ed.) (National Comm. on Maternal Health, 2 East 103rd St., N.Y.)

SUGGESTIONS FOR A BASIC DEMOGRAPHIC LIBRARY (The Population Council, 230 Park Ave., New York 17). A compilation of books on fertility, mortality and similar topics.

*FILM GUIDE (PP-WP publication). Reviews by Planned Parenthood's Film Review Panel of 16mm films on population, family planning, education for marriage, human reproduction, childbirth. (#397)

Directories

PLANNED PARENTHOOD AFFILIATES, (PP-WP Publication). Names and addresses of all Planned Parenthood Centers in the U.S.A. (#396)

*INTERNATIONAL PLANNED PARENTHOOD DIRECTORY. Names and addresses of family planning services throughout the world. Published by International Planned Parenthood Fed., 64 Sloane St., London S.W. 1, England.

*POPULATION RESEARCH AND STUDY CENTERS (PP-WP mimeo M-9801). List of public and private agencies and universities offering programs of study and/or research in the fields of population and family planning. (#M-9801)

*Available from PP-WP. Use number where listed. Where price is omitted, item is free. Reduced prices are offered for orders in volume.

A Selected List of Films About Population and Family Planning

***In Your Hands**
24 minutes. Sound. Black and White.
A moving and dramatic account of India's population problem and how family planning answers the needs of both individual families and the national interest. Of broad general appeal, this is adaptable to events centered around the international problem.

***A Great Problem**
7 minutes. Sound. Color.
A very charming animated cartoon presentation of the case for family limitation made by the Government of India. Broad audiences on every level will find much of interest in this imaginative and colorful short which permits the viewer to identify rather easily with the problems of overpopulation generally. A good film for use with a speaker. Its presentation makes a good take-off point for discussion of the world population problem, population in the United States and the general question of birth control.

***Margaret Sanger**
15 minutes. Sound. Black and White.
A documentary account of the growth of the American birth control movement which tells the dramatic and moving story of Mrs. Sanger's fight to make family planning available to America's women. The film brings the story up to the present day, shows the problems of growing populations all over the world and poses some questions for the future. Narrated by Katharine Hepburn. Produced by Herman J. Engel for Planned Parenthood-World Population.

***Regional Report: Birth Control**
1 hour. Sound. Black and White.
National Educational Television takes its cameras to different parts of the country and examines the attitudes on birth control of people with a variety of professions and beliefs. A Planned Parenthood Executive Director in Arizona, a minister in Texas, a public health physician in the Midwest, a Chicago philanthropist, a newspaperman are among the many people who speak frankly in this provocative discussion.

***Open End—Birth Control**
40 minutes. Sound. Black and White.
This is the television show that reveals so strikingly the changing climate in the Catholic Church. With special permission from David Susskind and Talent Associates, PPWP has edited it for use as a "discussion springboard."

*Rental through Planned Parenthood-World Population Film Library, 267 W. 25th Street, New York, N.Y. 10001.

PARTICIPANTS:
Dr. Alan F. Guttmacher, President, Planned Parenthood-World Population
Father Francis X. Murphy, Redemptorist Order, Professor, Patristic Moral Theology, Rome
Dr. Louis Dupre, Associate Professor, Philosophy and Theology, Georgetown University
Dr. Gregory Pincus, Research Director, Worcester Foundation for Experimental Biology
Dr. Richard Easterlin, Chairman, Department of Economics, University of Pennsylvania
Dr. Lincoln Day, Research Associate, Columbia University Bureau of Applied Social Research

*Costly Crowd
15 minutes. Sound. Color.
Dramatized presentation of a businessman's dawning recognition of the population problem in the U.S. Five documentary episodes, built arouid characters of real human dimensions, show such visible symptoms as overcrowded cities, highways, schools and hospitals and rising costs. A doctor convinces the community's business leader to examine the work of Planned Parenthood and the concept of birth limitation.

*The Squeeze
10 minutes. Sound. Black and White.
The population problem's most disturbing aspects: Hunger, crowding, and the subversion of human development are effectively presented. The camera, in a series of dramatic shots, explores shocking aspects of the consequences of the population explosion. The evidences of widespread hunger and the probability of its extension as global population rises have powerful impact.

The film intentionally raises more questions than it answers and is designed to be complemented by a discussion of population control and what citizens and governments can do about it.

Population Ecology (Encyclopedia Britannica Films, Inc.)
19 minutes. Sound. Color and Black and White.
Examines some of the factors limiting growth of plant and animal populations in their natural environments; explains how man's success in shaping his environment to meet his needs has affected the growth rate of human populations and considers some of the causes of the population explosion and some problems related thereto.
Designed primarily for high school and biology classes and comes with a study guide.

*Rental through Planned Parenthood-World Population Film Library, 267 W. 25th Street, New York, N.Y. 10001.

The Earth and Mankind

Six-film series surveying the world population problem and food supply. Produced by the National Film Board of Canada.

28 minutes (each film). Black and White.

This series, intended for high-school age audiences, probes the population problem. Stanley Burke, foreign correspondent and United Nations commentator, is the narrator in a round-the-globe census survey which includes these films:

1. PEOPLE BY THE BILLIONS
   An examination of the implications of the population explosion already under way.
2. MAN AND HIS RESOURCES
   A study of the meaning of the Universal Declaration of Human Rights in terms of the basic raw materials of existence.
3. TO EACH A RIGHTFUL SHARE
   An examination of man's efforts to achieve a better life.
4. THE GLOBAL STRUGGLE FOR FOOD
   A progress report on efforts to expand world food production through water and flood control, agricultural advances, land-distribution, etc.
5. CAN THE EARTH PROVIDE?
   A view of the resources of science to find a new means of survival.
6. CHALLENGE TO MANKIND
   Mme. Pandit, India; Paul Hoffman, United States; Lord Boyd Orr, United Kingdom; Dr. Victor Belaunde, Peru; and Dr. Hugh Keenleyside, Canada, authorities, express their views on the threat to mankind of over-population and tender some possible solutions.

The Population Problem

Six 60-minute documentaries produced by National Educational Television:

1. BRAZIL: THE GATHERING MILLIONS
   A documentary which tells through the life of migrants what falling death rates and high birth rates mean in Brazil's cities.
2. THE EUROPEAN EXPERIENCE
   Europe's relatively stable population growth is viewed as a lesson of significance to the rest of the world. A historical treatment, tracing the role of social and economic revolutions from the Middle Ages to the present.
3. JAPAN—ANSWER IN THE ORIENT
   The solutions this country has found to stemming the tide of its population growth are outlined.

4. INDIA—WRITINGS ON THE SAND
   This film discusses the enormous population problems which threaten India, a land where one million people are born each month.

5. U.S.A.—TROUBLE IN PARADISE
   How does population growth affect life in the U.S.? This film alerts viewers to America's population problems.

6. NEW FACTS OF LIFE
   Takes viewers into the laboratories of scientists trying to find simpler methods of birth control acceptable to all faiths and seeking to solve the problems of infertility among the childless.

All NET Films are obtainable from Audio-Visual Center, Indiana University, Bloomington, Ind.

FOR A MORE COMPREHENSIVE listing of films on population problems, family planning and related subjects see Planned Parenthood—World Population's *Guide to Films* obtainable from PPWP, 515 Madison Avenue, New York, New York 10022.

Where rental source is not given try local educational film libraries.

Planned Parenthood Regional Offices

WESTERN (Alaska, Arizona, California, Hawaii, Idaho, Nevada, Oregon, Utah, Washington)
655 Sutter Street—Room 401
San Francisco, Calif. 94102

SOUTHWEST (Arkansas, Louisiana, New Mexico, Oklahoma and Texas)
4928 Burnet Road—Room 204
Austin, Texas 78756

MIDEAST (Illinois, Indiana, Kentucky, Michigan, Ohio and Wisconsin)
1111 East 54th Street
Indianapolis, Indiana 46220

MIDWEST (Colorado, Iowa, Kansas, Minnesota, Missouri, Montana, North Dakota and South Dakota, Wyoming)
406 West 34th Street—Room 725
Kansas City, Missouri 64111

SOUTHEAST (Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina, Tennessee, Virginia and West Virginia)
3030 Peachtree Street N.W.
Atlanta, Georgia 30305

MID-ATLANTIC (Delaware, District of Columbia, Maryland, New Jersey and Pennsylvania)
1605 Race Street
Philadelphia, Pa. 19103

NORTHEAST (Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island and Vermont)
515 Madison Avenue
New York, N.Y. 10022